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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,788	01/16/2004	Yuichi Ishino	1715432	6295

24240 7590 02/09/2006

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EXAMINER	
BEAUCHAINE, MARK J	
ART UNIT	**PAPER NUMBER**
3653	

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/758,788	ISHINO ET AL.	
	Examiner	Art Unit	
	Mark J. Beauchaine	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 May 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

RW

DETAILED ACTION

Specification

The substitute specification filed 22 December 2005 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because the statement as to a lack of new matter under 37 CFR 1.125(b) is missing. Furthermore, paragraphs of the substitute specification are not individually numbered in Arabic numerals as required by M.P.E.P. 608.01(q).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 14, 15, 18, 19, 22, 23, 35, 36, 39, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Number US 6,431,318 B1 by Tanaka (hereinafter "Tanaka") in view of Patent Number 4,401,189 by Majewski (hereinafter "Majewski"). The food and drink conveying system disclosed by Tanaka incorporates conveying path 3, scanner 5a, display members 4, scanner 5b and control unit 9 that read on the Applicant's circulation-type carrying path, identification information reading means, sign part, passage detection means and registering means, respectively. Furthermore, the conveyor areas between said display members read on the

Applicant's zones. Although Tanaka fails to disclose a container throwing-in prohibited area (*i.e.*, a conveying area shielded from unwanted articles), the use of such an area associated with article conveyors is well known in the art.

Majewski teaches an article conveying apparatus that moves articles via transport belt 12, on to common ramp 16 and then onto transport belts 17 and 18. Majewski further teaches a separating member 23 that is located adjacent to transport belts 17 and 18. The area in close proximity to said separating member 23 reads on the Applicant's container throwing-in prohibition area. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the separating member 23 of Majewski into the conveying system of Tanaka to provide an effective means of prohibiting customers and restaurant personnel from inserting unwanted articles onto the conveying path and food and beverage containers thereon.

Regarding claim 15, the separating member 23 of Majewski reads on the Applicant's throwing-in wall.

Regarding claims 18 and 19, although display members 4 disclosed by Tanaka are not specifically shown as being equally spaced it would have been obvious to one of ordinary skill in the art to space such indicia at constant intervals on the conveying path to provide a standardized pattern of data entry into scanners 5a and 5b.

Regarding claims 22 and 23, the use of the scanners 5a and 5b on conveying path 3 disclosed by Tanaka read identifying marks Q attached to plates 41. The detection of the presence of an article is inherent in such a reading of identifying marks.

Thus, the combination of an identification reading means with a pass-through detection means is an inherent configuration of such scanners.

Regarding claims 35, 36 and 39, the scanners 5a and 5b disclose by Tanaka read identifying marks Q without contacting said marks. Said scanners read on the Applicant's non-contacting identification information reading means of claims 35 and 36, and marks Q read on the Applicant's wireless identification tag of claim 39.

Regarding claims 44 and 45, Tanaka discloses a counter area in kitchen S1 (see Figure 1) that is adjacent to conveying path 3 and reads on the Applicant's throwing-in area (*i.e.*, an article insertion area). Furthermore, said counter area of Tanaka is upstream of scanner 5a. Although said counter area is not adjacent to scanner 5a, it would have been obvious to one of ordinary skill in the art to install an article scanner at any point along conveying path 3 that is down stream of the counter area to provide an effective means of sensing articles on said path that have been loaded onto said path from the kitchen counter area.

Claims 16, 17, 21, 22, 24, 25, 37, 38, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Majewski as applied to claim 14 above, and further in view of Patent Number 5,557,096 by Watanabe et al (hereinafter "Watanabe"). Although Watanabe fails to incorporate a tunnel-shaped cover along conveying path 3, the use of such covers to enclose sections of pathways that are scanned by sensors is well known in the art. Watanabe teaches a scanning arrangement (Figure 56) that incorporates interrogator 335 that reads information from a

circuit 347 contained within paper web 336 as said web passes through electromagnetic shields 344 and 345 (column 34, lines 3 plus). Said interrogator 335, web 336 and electromagnetic shields 344 and 345 read in the Applicant's identification information reading means, carrying path and tunnel-shaped cover, respectively. Although the sensing arrangement of Watanabe is not associated with detecting food items, the generic configuration of scanning tagged items as said items are transported along a conveying path is well known in the art. Accordingly, it would have been obvious to one or ordinary skill in the art to incorporate the tunnel-shaped electromechanical shields 344 and 345 of Watanabe into the scanners of Tanaka to provide an effective means of shielding said scanners from electromechanical interference and unwanted objects.

Regarding claims 20 and 21, although display members 4 disclosed by Tanaka are not specifically shown as being equally spaced it would have been obvious to one of ordinary skill in the art to space such indicia at constant intervals on the conveying path to provide a standardized pattern of data entry into scanners 5a and 5b.

Regarding claims 24 and 25, the use of the scanners 5a and 5b on conveying path 3 disclosed by Tanaka read identifying marks Q attached to plates 41. The detection of the presence of an article is inherent in such a reading of identifying marks. Thus, the combination of an identification reading means with a pass-through detection means is an inherent configuration of such scanners.

Regarding claims 37 and 38, the scanners 5a and 5b disclose by Tanaka read identifying marks Q without contacting said marks. Said scanners read on the Applicant's non-contacting identification information reading means.

Regarding claims 46 and 47, Tanaka discloses a counter area in kitchen S1 (see Figure 1) that is adjacent to conveying path 3 and reads on the Applicant's throwing-in area (*i.e.*, an article insertion area). Furthermore, said counter area of Tanaka is upstream of scanner 5a. Although said counter area is not adjacent to scanner 5a, it would have been obvious to one of ordinary skill in the art to install an article scanner at any point along conveying path 3 that is down stream of the counter area to provide an effective means of sensing articles on said path that have been loaded onto said path from the kitchen counter area.

Claims 26, 27 and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Majewski as applied to claim 14 above, and further in view of Patent Number US 6,554,106 by B1 by Tokimoto (hereinafter "Tokimoto"). Although the food and drink conveying system disclosed by Tanaka fails to incorporate a time stamp configuration, the use of such a configuration is well known in the food conveying art. Tokimoto teaches a food-item conveying device that transports food containers P along conveying path 30, scans said items via scanners 40a, 40b, 41a and 41b and registers container information via programmable control unit 50. Said conveying path 30 and control unit 50 read on the Applicant's conveying path and registering means, respectively. Furthermore, Tokimoto teaches "detecting means 5c for calculating the circulating time of the containers P . . . circulating through the conveying path 30" (column 3, lines 67 plus). Said detecting means 5c reads on the time information registration of food items introduced on the conveying path.

Regarding claims 30-34, since the time registering configuration of Tokimoto monitors and register the time a particular food item circulates upon the conveyor, the detection and registration of the time said item is removed from the conveyor is an inherent part of said monitoring process. Furthermore, since the time registration of Tokimoto is updated with the insertion or removal of a food item upon or from the conveyor, an update of a time registration is inherent in said food item monitoring.

Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Majewski as applied to claim 14 above, and further in view of Patent Number US 6,581,727 B1 by Tokuno (hereinafter "Tokuno"). The food and drink conveying system disclosed by Tanaka incorporates conveying path 3, scanner 5a, display members 4, scanner 5b and control unit 9 that read on the Applicant's circulation-type carrying path, identification information reading means, sign part, passage detection means and registering means, respectively. Furthermore, the conveyor areas between said display members read on the Applicant's zones. Although Tanaka fails to disclose a container throwing-in prohibited area (*i.e.*, a conveying area shielded from unwanted articles), the use of such an area associated with article conveyors is well known in the art.

Majewski teaches an article conveying apparatus that moves articles via transport belt 12, on to common ramp 16 and then onto transport belts 17 and 18. Majewski further teaches a separating member 23 that is located adjacent to transport belts 17 and 18. The area in close proximity to said separating member 23 reads on the

Applicant's container throwing-in prohibition area. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the separating member 23 of Majewski into the conveying system of Tanaka to provide an effective means of prohibiting customers and restaurant personnel from inserting unwanted articles onto the conveying path and food and beverage containers thereon.

Regarding claim 15, the separating member 23 of Majewski reads on the Applicant's throwing-in wall.

Although Tanaka fails to disclose an identification information reading means that reads price information the reading of price information by food conveying apparatus is well known in the art. Tokuno teaches a food conveying apparatus that transports food items along rotary conveyor 22 and senses said items via measuring means 32. Said conveyor and measuring means read on the Applicant's carrying path and identification information reading means, respectively. Furthermore, said measuring means 32 of Tokuno senses item price information via identifiers 58 located on trays 20 (column 13, lines 66 plus). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the price reading feature of Tokuno into the conveyor system of Tanaka to provide and effective means of providing an accounting of food items processed.

Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Majewski in view of Watanabe as applied to claim 16 above, and further in view of Patent Number US 6,581,727 B1 by Tokuno (hereinafter "Tokuno").

The food and drink conveying system disclosed by Tanaka incorporates conveying path 3, scanner 5a, display members 4, scanner 5b and control unit 9 that read on the Applicant's circulation-type carrying path, identification information reading means, sign part, passage detection means and registering means, respectively. Furthermore, the conveyor areas between said display members read on the Applicant's zones. Although Tanaka fails to disclose a container throwing-in prohibited area (*i.e.*, a conveying area shielded from unwanted articles), the use of such an area associated with article conveyors is well known in the art.

Majewski teaches an article conveying apparatus that moves articles via transport belt 12, on to common ramp 16 and then onto transport belts 17 and 18. Majewski further teaches a separating member 23 that is located adjacent to transport belts 17 and 18. The area in close proximity to said separating member 23 reads on the Applicant's container throwing-in prohibition area. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the separating member 23 of Majewski into the conveying system of Tanaka to provide an effective means of prohibiting customers and restaurant personnel from inserting unwanted articles onto the conveying path and food and beverage containers thereon.

Although Tanaka fails to disclose an identification information reading means that reads price information the reading of price information by food conveying apparatus is well known in the art. Tokuno teaches a food conveying apparatus that transports food items along rotary conveyor 22 and senses said items via measuring means 32. Said conveyor and measuring means read on the Applicant's carrying path and identification

information reading means, respectively. Furthermore, said measuring means 32 of Tokuno senses item price information via identifiers 58 located on trays 20 (column 13, lines 66 plus). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the price reading feature of Tokuno into the conveyor system of Tanaka to provide and effective means of providing an accounting of food items processed.

Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Patent Number US 6,427,806 B1 by Tanaka because of its sensor receivers 7a and 7b.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark J. Beauchaine whose telephone number is (571)272-6934. The examiner can normally be reached on 8:00AM through 5:00PM Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571)272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mjb

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